

24 June 2011

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Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

*Re: Spectrum Task Force Requests Information on Frequency Bands Identified by
NTIA as Potential Broadband Spectrum, ET Docket No. 10-123*

Dear Ms. Dortch:

On June 23, 2011, Chris Pearson, President of 4G Americas, LLC ("4G Americas") met with Chairman Genachowski, Wireless Bureau Chief Rick Kaplan, Chief of Strategic Planning and Policy Analysis Paul de Sa, and the Chairman's Senior Counsel Josh Gottheimer to thank them for their leadership on requesting public comments on the bands identified by NTIA for relocation assessment.¹ Accompanying Mr. Pearson was 4G Americas member representatives Steve Sharkey of T-Mobile, Kelley Shields of Ericsson and Patricia Paoletta, Wiltshire & Grannis LLP, counsel to 4G Americas. In particular, 4G Americas noted the economic value of relocating federal users from 1755-1780 MHz and pairing that spectrum with the 2155-2180 MHz AWS-3 extended band. 4G Americas also noted its support for Commission incentive auction authority, stating that if the U.S. does not auction sufficient spectrum in the near-term, within five years it will lose its current international leadership in mobile broadband.

4G Americas unites mobile operators, vendors, and manufacturers in the Americas to provide a single voice representing the Third Generation Partnership Project ("3GPP") family of wireless technologies, such as HSPA, HSPA+, LTE and LTE Advanced. The mission of 4G Americas is to promote, facilitate, and advocate for the deployment of the 3GPP family of mobile broadband technologies throughout the Americas, including networks, services, applications, and wirelessly connected devices..

As 4G Americas noted in its comments in ET Docket 10-123², internationally harmonized spectrum is more likely to result in equipment that has benefitted from global economies of scale and scope, as well as innovation. The 1755-1780 MHz band—unlike the 1695-1710 MHz band—is regionally and internationally harmonized spectrum for mobile broadband. In general, the 1.7/2.1 GHz band, the 3GPP Band 10, is harmonized in our hemisphere for mobile broadband technologies including HSPA and LTE. 4G Americas recounted the history of NTIA's analysis of the band. Nearly a decade ago, NTIA presented as a

¹ See Public Notice, ET Docket 10-123 (rel. March 8, 2011).

² Comments of 4G Americas at 2-3, ET Docket No. 10-123 (filed April 22, 2011).

feasible option for accommodating advanced mobile systems the use of the 1755-1780 MHz band as part of a pairing arrangement similar to that recommended today by 4G Americas.³ During the Clinton Administration, NTIA conducted a technical study on the potential for accommodating advanced wireless services in the 1755-1850 MHz band.⁴ The report on that study presented the option of pairing the 1755-1780 MHz band for mobile devices (for shared use with the federal government) with a band above 2110 MHz for base station use.⁵ The option was presented after consideration of the Department of Defense's ("DoD") analysis of the compatibility between major DoD systems in the 1755-1850 MHz band and advanced wireless systems, as well as relocation costs, operational impacts of DoD migration, and the time requirements should DoD systems move from the band.⁶

However, in 2002, in conjunction with an executive-branch task force, NTIA altered its position and reported that the 1755-1770 MHz band was not viable for wireless broadband use because of DoD's operations in the band.⁷

4G Americas is pleased that the 1755-1780 MHz band is once again being assessed. Commercial mobile broadband allocations in the 1755-1780 MHz band (uplink), especially when paired with 2155-2180 MHz (downlink), will capitalize on the economies of scale in infrastructure and devices. Indeed, the U.S. government has supported, through a Contribution to the ITU's WRC, providing "uniform guidance to administrations, operators and manufacturers in terms of deploying IMT-2000 and other advanced communication applications" and that "administrations deploying [advanced wireless services] should use the relevant international technical characteristics, as identified by ITU-R and ITU-T Recommendations."⁸ In our region of the Americas, CITEL⁹ has endorsed pairing the 2110-2170 MHz band as a downlink band with the 1710-1770 MHz uplink band.¹⁰ The Americas and providers in other regions have

³ At the 1992 World Administrative Radio Conference, international agreement was reached that 2110-2200 MHz would be allocated for advanced wireless services. Eight years later, WRC-2000 identified additional bands for advanced wireless services, including 1710-1885 MHz.

⁴ *The Potential for Accommodating Third Generation Mobile Systems in the 1710-1850 MHz Band: Federal Operations, Relocation Costs, and Operational Impacts*, Final Report, NTIA Special Publication 01-46 (Mar. 2001) available at <http://www.ntia.doc.gov/ntiahome/threeg/33001/3g33001.pdf> ("2001 Final Report").

⁵ *Id.* at xv, 4-17. ("In Phase 2, the 1755-1780 MHz band would be added for sharing with mobiles, paired with base stations above 2110 MHz (e.g., in the 2500-2690 MHz band.") The report acknowledged that sharing issues would need to be resolved and that protection areas might need to be established. *Id.* at xxi, 4-17-19.

⁶ *Id.*

⁷ *An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands*, 4 (July 22, 2002) available at http://www.ntia.doc.gov/reportsarchive2000_2003.html.

⁸ *Proposal for Terrestrial and Satellite Components of IMT-2000*, United States of America Proposals for the Work of the Conference, 15, WRC-2000 (Apr. 17, 2000).

⁹ CITEL is the acronym for the Organization of American States' Inter-American Commission on Telecommunications, and is the inter-governmental and industry body through which the United States and its neighbors in the Americas coordinate spectrum use for our region -- Region 2 in the International Telecommunication Union.

¹⁰ See CITEL, XXI Meeting of Permanent Consultative Committee III: Radiocommunications, *Final Report* 21 (2002) (Option 5, "Mobile transmit band 1710-1770 MHz, paired with the global base transmit band 2110-2170 MHz, consistent with a duplex separation of 400 MHz."), http://www.citel.oas.org/pcc3_old/final/P3-2371r2_i.doc.

identified the 1.7/2.1 GHz Band 10 as ideal for mobile broadband. The ITU has also endorsed this pairing, as has the industry standards body 3GPP.¹¹ With a critical mass of global vendors and operators developing network equipment and devices to operate in Band 10, equipment will be readily available in this important band, and auction revenues will reflect that ecosystem.

Conversely, fragmented spectrum allocations make it more difficult for vendors to export equipment, technologies, and services developed for that fragment to other markets. U.S. providers for that fragment would not benefit from developments in international markets. Fragmented spectrum allocations hamper innovation and require companies to dedicate resources for a single market, rather than sharing those development costs globally. Fragmented allocations for the U.S. market raise the cost of devices for the U.S. consumer and limit the availability of products and services in the U.S. market. Moreover, specialized technology takes time to commercialize, so not only would U.S. consumers using fragmented spectrum have higher cost, more limited devices and services, but those devices and services would take longer to come to market mobile broadband services and provides a guide for securing a bright mobile broadband future to serve society's wireless and technology needs.

Sincerely,



Patricia Paoletta

cc: Rick Kaplan
Ruth Milkman
Paul de Sa
Josh Gottheimer
Mark Stone
Angela Giancarlo
Louis Peraetz
Jon Liebovitz
Roger Noel

Attachment: Power Point, Chris Pearson, 4G Americas President, *3GPP Mobile Broadband in a Connected World* (June 23, 2011).

¹¹ The International Telecommunication Union recommends as an option in implementing advanced wireless services that Administrations pair 2110-2170 MHz as a downlink band with an uplink band at 1710-1770 MHz. See Recommendation ITU-R M.1036-3.